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10/604,495

07/25/2003

Troy Fields

20.2771

1494

23718

7590

12/21/2005

SCHLUMBERGER OILFIELD SERVICES  
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EXAMINER

COLLINS, GIOVANNA M

ART UNIT

PAPER NUMBER

3672

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |  |                     |  |
|------------------------------|------------------------|--|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> |  | <b>Applicant(s)</b> |  |
|                              | 10/604,495             |  | FIELDS, TROY        |  |
|                              | <b>Examiner</b>        |  | <b>Art Unit</b>     |  |
|                              | Giovanna M. Collins    |  | 3672                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-56 is/are pending in the application.
- 4a) Of the above claim(s) 2-16,22,36-47,50,51 and 54 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,17-21,23-35,48,49,52,53,55 and 56 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 23-24,26-28,34, 48,49,52,53,55, and 56 are rejected under 35 U.S.C. 102(b) as being anticipated by MacDougall 5,692,565.

MacDougall discloses (see fig. 1) a method for reducing debris in a perforation comprising positioning a downhole tool (12) in the wellbore, a bit (19) extendable from the tool, positioning the bit in the perforation and when the bit is in the perforation it will block debris as formation fluid flows from the perforation into the tool so that contamination is reduced.

Referring to claim 24, MacDougall disclose creating a perforation in the sidewall of the wellbore (col. 4, lines 55-68).

Referring to claims 26-27, MacDougall discloses when the bit (19) is rotating in the perforation; it will dislodge debris from the perforation.

Referring to claim 28, MacDougall discloses plugging the perforation (col. 3, lines 3-4).

Referring to claim 34, MacDougall discloses the wellbore is cased (at 11).

Referring to claims 48-49 and 55-56, MacDougall teaches a tool that samples and tests fluid coming from a perforation (col. 3, lines 16-19).

Referring to claim 52, MacDougall discloses a method for reducing debris comprising positioning a downhole tool (12) in the wellbore the tool having an arm (18), and positioning the debris blocker (19) in the perforation, when in the perforation the blocker prevents debris (using filter at 261) from entering the downhole tool as formation fluid flow from the perforations.

Referring to claim 53, MacDougall discloses is a bit (19) adapted to selectively move within the perforation capable to clear debris.

2. Claims 23-24,26,27,29 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Bond 6,276,453.

Bond discloses a method for reducing debris in a perforation comprising positioning a downhole tool (10) in the wellbore, a bit (16) extendable from the tool, positioning the bit in the perforation to block debris (through filter see fig. 8, at 85) as formation fluid flows from the perforation into the tool so that contamination is reduced.

Referring to claim 24, Bond disclose creating a perforation in the sidewall of the wellbore (col. 6, lines 36-39).

Referring to claims 26-27, Bond discloses activating the bit by advancing the bit (by adding discs 66 to advance the bit further into the perforation, see col. 11, lines 54-57) to dislodge debris from the perforation.

Referring to claim 29, Bond disclose placing a filter (see fig. 8, at 85) in the perforation.

Referring to claim 34, Bond discloses the wellbore is cased (see fig. 2, at 12).

3. Claims 23-24,29,35, 48-49, 52 and 55-56 are rejected under 35 U.S.C. 102(b) as being anticipated by Ciglenec et al. 6,164,126.

Ciglenec discloses a method for reducing debris in a perforation comprising positioning a downhole tool (fig. 1, 10) in the wellbore, a bit (see fig. 4a-4d, at 231) extendable from the tool, positioning the bit in the perforation to block debris (through filter see fig. 4d, at 261) as formation fluid flows from the perforation into the tool so that contamination is reduced.

Referring to claim 24, Ciglenec disclose creating a perforation in the sidewall of the wellbore (see bit penetrate into formations in fig 4c and 4d).

Referring to claim 29, Ciglenec discloses placing a filter (261) in the perforation.

Referring to claims 35, Ciglenec discloses the wellbore (at 30) is an open wellbore.

Referring to claims 52, Ciglenec discloses a method for reducing debris comprising positioning a downhole tool (fig. 1, 10) in the wellbore the tool having an arm (200), and positioning the debris blocker (see fig. 4a-4d, at 231) with the arm in the perforation, the blocker preventing debris (using filter at 261) from entering the downhole tool as formation fluid flows from the perforation.

Referring to claims 48-49 and 55-56, Ciglenec discloses sampling and testing the formation fluid (col. 10, lines 36-42).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1,18,20,21,52, and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bond '453.

Bond discloses a downhole tool for reducing debris comprising a housing (10), a debris blocker (16) releasable (col. 11, lines 26-28) in the perforation to prevent debris from flowing into the perforation. In this embodiment, Bond does not disclose an arm that positions the debris blocker. In the embodiment disclosed in Fig. 9, Bond discloses a downhole tool with an arm (88) to position an object in a perforation. The arm allows the object to be retracted some if it is sent out too far. As it would be advantageous to have an arm to retract the bit if it goes out too far, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the embodiment disclosed by Bond to have an arm to position the bit in view of the embodiment of Fig. 9.

Referring to claim 18, Bond discloses the wellbore is cased (see fig. 2, at 12).

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Referring to claim 20, Bond discloses the debris blocker has a bit (at 82) and is adapted to create the perforation (col. 6, lines 36-39).

Referring to claim 21, Bond discloses the debris blocker is operable between a station and an activated mode, where in the stationary mode the bit (16) permits flow of fluid passed the outer surface of the bit while preventing debris (through filters) and the activated mode the bit is movable to dislodge debris (when the bit is advancing in the perforation).

Referring to claim 52, Bond discloses the method of reducing debris in a perforation comprising positioning a downhole tool (10) in the wellbore, a bit (16) extendable from the tool, positioning the bit in the perforation to block debris (through filter see fig. 8, at 85) as formation fluid flows from the perforation into the tool. In the embodiment disclosed in Fig. 9, Bond discloses a downhole tool with an arm (88) to position an object in a perforation. The arm allows the object to be retracted some if it is sent out too far. As it would be advantageous to have an arm to retract the bit if it goes out too far, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Bond to have an arm to position the bit in view of the embodiment of Fig. 9.

Referring to claim 53, Bond disclose the bit (16) is selectively movable (as the bit advances) within the perforation to remove debris.

5. Claims 1 and 18-21 are rejected under 35 U.S.C. 102(b) as being anticipated by MacDougall et al. 5,692,565 in view of Bond '839.



Referring to claims 1 and 18-20, MacDougall discloses (figs. 1) a downhole tool for reducing debris comprising a housing (17) positionable in the cased wellbore (at 11), and an arm (18) in the housing and extendable therefrom and at least one debris blocker comprising a bit (19) adapted to create the perforation, the debris blocker positioned in the perforation via the arm and a seal (17b) and adapted to prevent debris from flowing through the perforation into the housing with a formation fluid whereby the contamination in the formation fluid is reduced. MacDougall does not disclose the debris blocker is releasable. Bond teaches a debris blocker that is releasable in order to plug a perforation. As it would be advantageous to plug the perforation when no longer needed it would be obvious to one of ordinary skill in the art at the time of the invention to modify the debris blocker disclosed by MacDougall to be releasable as taught by Bond.

Referring to claim 21, MacDougall discloses the bit is positionable in the perforation and is operable with a stationary (before retracting bit) and activated mode (fig. 5), wherein the stationary mode the bit permits the flow of fluid past the outer surface of the bit wherein preventing the flow of debris and in the activated mode the bit is movable to dislodge debris in the perforation.

6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacDougall et al. 5,692,565 in view of Bond '839 as applied to claim 1 and further in view of Brieger 3,934,468.



MacDougall, as modified, discloses the tool of claim 1 but does not disclose the wellbore is uncased. Brieger teaches that it is well known in the art to also test uncased wellbores (col. 1, lines 1-26). As one of ordinary skill in the art would be familiar with also having a tool to get samples from uncased well bore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by MacDougall to test uncased wellbore as taught by Brieger.

7. Claim 17 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bond '453 in view of Brieger 3,934,468.

Bond discloses the method of claim 23 but does not disclose the wellbore is uncased. Brieger teaches that it is well known in the art to obtain formation fluids from uncased wellbores (col. 1, lines 1-26). As one of ordinary skill in the art would be familiar with also having a tool to get formation fluid from uncased well bore, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Bond to test uncased wellbore as taught by Brieger.

8. Claims 25,28, 48-49 and 55-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bond '453 in view of MacDougall '565.

Bond does not disclose detecting debris in the perforation. MacDougall teaches a tool that samples fluid coming from a perforation (col. 3, lines 16-19). The sampling can used to determined if there is debris in the fluid and thus determines if the filters are being effective in removing the debris. As it would be advantageous to ensure the filters

are effective in moving the debris, it would be obvious to one of ordinary skill in the art to modify the method disclosed by Bond to detect debris in the perforation in view of the teachings of MacDougall.

Referring to claim 28, Bond does not disclose plugging the perforation. MacDougall teaches plugging the perforation (col. 3, lines 3-4). MacDougall teaches plugging the perforation prevents other formation fluids may be in lost in the perforation when it is no longer being used (col. 2, lines 16-26). As it would be advantageous to prevent the lost of formation fluids, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Bond to plug the perforation in view of the teaches of MacDougall.

Referring to claims 48-49 and 55-56, Bond does not disclose sampling and testing the formation fluid. MacDougall teaches a tool that samples and tests fluid coming from a perforation (col. 3, lines 16-19) . The sampling helps to determine the quality and content of the formation fluid. AS it would be advantageous to determine the quality and content of the formation fluid, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Bond to sample and test the formation fluid in view of the teaches of MacDougall.

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacDougall '565 in view of Taggart 3,430,711.

MacDougall does not disclose position a filter in the perforation. Taggart teaches positioning a filter in a perforation to prevent sand and other materials from flowing from

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the perforation (col. 2, lines 27-31). As it would be advantageous to prevent sand and other material from entering the tool while doing the sampling and testing, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by MacDougall to have filter in view of the teaches of Taggart.

10. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over MacDougall '565 in view of Taggart 3,430,711 as applied to claim 29 and further in view of Burnside 3,730,268.

MacDougall, as modified, does not disclose advancing the bit through the filter. Burnside teaches drilling through a filter when the filter is no longer needed (col. 4, lines 1-18). As it would be advantageous to drill through a filter when it is no longer needed or becomes plugged and cannot be used, it would be obvious to one of ordinary skill in the art to modify the method disclosed by MacDougall to advance the bit through the filter in view of the teaches of Burnside.

11. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bond '453 in view of Urbanosky 3,924,463.

Bond does not disclose a stacked filter. Urbanosky teaches filters (45, 46) stacked concentrically to further filter smaller particles of plugging materials (col. 4, lines 50-56). As it would be advantageous to filter as much of the debris as possible, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the method disclosed by Bond to have a stacked filters as taught by Urbanosky.

12. Claims 31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bond '453 in view of Allen et al '955.

Bond does not disclose a stacked filter. Allen teaches stacking filter linearly in a perforation (see fig. 1, at 20 and col. 4, lines 24-29). Because the filters are stacked linearly in the perforation, the filters do not have to be as long. Therefore, the filters can have smaller sections were are easier store and stacked to the needed length when put into use. As it would be advantageous to be able to store the filters in smaller units, it would be obvious to modify the method disclose by Bond to stack the filters linearly in the perforation in view of the teachings of Allen.

### ***Response to Arguments***

13. Applicant's arguments with respect to claims 23-35,48-49 and 52-53,55-56 have been considered but are moot in view of the new ground(s) of rejection.

Referring to the arguments comments concerning the 103 rejection using MacDougall in view of Bond '839, the applicant argues claim 1 states the debris blocker is released to block debris. This argument is more limiting than the actual claim. Claim 1 states that the debris blocker is releasable and that it prevents debris from flowing through the perforation. The applicant argues that the Bond releasing feature teaches away from the reference because when released the bit plugs the formation. However, there is no statement in claim 1 that fluid flow must continue after the debris blocker has been released only that it is releasable. The applicant also states there is no motivation

to combine the references and that neither reference contemplates the problem of contamination. It has been held that the mere fact the references relied on by Patent and Trademark office fail to evince an appreciation of the problem identified and solved by the applicant is not, standing alone, conclusive evidence of the nonobviousness of the claimed subject matter. The references may suggest doing what the applicant has done even though workers were ignorant of the existence of the problem. In re Gershon, 152 USPQ 602 (CCPA 1967). MacDougall discloses a bit debris blocker but does not disclose it is releasable. Bond discloses a bit that can be released into a perforation to plug a perforation when no longer needed. The applicant also states the bit can be released into the perforation to plug the perforation when no longer needed (see last sentence of paragraph 0062). As it would be advantageous to plug off the perforation when no longer needed, it would be obvious to one of ordinary skill in the art to modify the tool disclosed by MacDougall to have a releasable bit in view of the teaches of Bond.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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